APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,330	03/07/2002	Mihaly Toth	44201757 PAR	6246

2512	7590	06/13/2005	EXAMINER

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EXAMINER
AVELLINO, JOSEPH E

ART UNIT	PAPER NUMBER
2143	

DATE MAILED: 06/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary	Application No.	Applicant(s)
	10/019,330	TOTH ET AL.
	Examiner	Art Unit
	Joseph E. Avellino	2143

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _26 May 2005_.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-22_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-22_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☒ All   b) ☐ Some *   c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-22 are presented for examination; claims 1, 18, 21, and 22

independent.

Specification

2.   The Office has considered the amendment to the title. The title of the invention is

still not descriptive. A new title is required that is clearly indicative of the invention to

which the claims are directed.

Claim Rejections - 35 USC § 102

3.   The text of those sections of Title 35, U.S. Code not included in this action can

be found in a prior Office action.

        Claims 1-4, 9-11, 15, 18, 21, 22 are rejected under 35 U.S.C. 102(e) as being

anticipated by Bayeh et al. (USPN 6,098,093) (hereinafter Bayeh).

4.   Referring to claim 1, Bayeh discloses a method of managing a plurality of

sessions (e.g. abstract), the sessions being between a plurality of terminals and a

server (i.e. web server and client) and a server having a plurality of threads (i.e.

servlets) the method comprising:

grouping the sessions into a plurality of groups (i.e. sending the client requests to

a web server based on a load balancing algorithm provided by the host 59) (col. 8, lines

50-55);

assigning a thread (i.e. servlet) to each group (i.e. client requests sent to a

particular web server) so that the assigned thread only handles the events of that group

of sessions (the servlet is assigned to each web server, which determines the identity of

the group of sessions) (col. 8, lines 42-67).

5.   Referring to claims 2 and 3, Bayeh discloses the grouping occurs when a session

is created or becomes active (it is understood that when a session is created, it is

inherently becoming active) (col. 8, lines 42-58).

6.   Referring to claim 4, Bayeh discloses one group is provided for each thread,

such that there are equal numbers of groups and threads (i.e. equal numbers of groups,

which are web servers receiving requests, and threads, which are servlet engines which

will participate in the session management solution) (col. 8, lines 59-67).

7.   Referring to claim 9, Bayeh discloses each group has a queue and each session

puts its events into that queue (col. 12, line 29-58).

8.   Referring to claim 10, Bayeh discloses the sessions are grouped by a thread

referred to as an acceptor thread (i.e. load balancing process (col. 8, lines 42-58).

9.   Referring to claim 11, Bayeh discloses the acceptor thread calls a function which

is answered by a notification that a new session has been created and then assigns the

new session to a particular session group (col. 8, lines 43-57).

10.   Referring to claim 15, Bayeh discloses load balancing means is included in the

assignment mechanism of the session (col. 8, lines 42-58).

11.   Referring to claim 16, Bayeh discloses the sessions involve obtaining information

or conducting transactions through the Internet (col. 8, lines 20-41).

12.   Claims 18, 21 and 22 are rejected for similar reasons as stated above.

Claim Rejections - 35 USC § 103

13.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

14.   This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

Claims 5-8, 12-14 and 17 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Bayeh.

15.   Referring to claim 5, Bayeh discloses the invention substantively as described in

claim 1. Bayeh does not specifically disclose the sessions are assigned statically to

particular threads, however does state that load-balancing techniques are well known in

the art (col. 8, lines 55-58). This would lead one of ordinary skill in the art to search for

load balancing techniques in which static assignment techniques (i.e. based on client's

IP address or round-robin technique) are well known in the art. By this rationale,

"Official Notice" is taken that both the concept and advantages of providing for static

load balancing techniques are well known and expected in the art. It would be obvious

to a person of ordinary skill in the art at the time the invention was made to modify the

invention of Bayeh to incorporate static load balancing techniques in order to easily

route requests between entities, without undue processing and thereby increasing

throughput and reducing overall system overhead.

16.   Referring to claim 6, Bayeh discloses the invention substantively as described in

claim 1. Bayeh does not specifically state a session is put into a first group in a first

time period before suspension and put into a second group in a second time period

following resumption, however when a session resumes, it will be processed by the

front-end processor as it was a new session connection, and will be routed as required

by the host 59, it will then be routed to a second group which may or may not be the

same as the first group. By this rationale it would have been obvious to one of ordinary

skill in the art to understand that a session is put into a first group in a first time period

before suspension and put into a second group in a second time period following

resumption to simplify connection processing and reduce overall system overhead.

17.   Referring to claim 7, Bayeh discloses the invention substantively as described in

claim 6 above. Bayeh does not specifically state the second group is chosen on the

basis of activity levels, however does disclose the sessions are assigned based on the

relative levels of particular threads, however does state that load-balancing techniques

are well known in the art (col. 8, lines 55-58). This would lead one of ordinary skill in the

art to search for load balancing techniques in which incorporate load balancing

assignment techniques (i.e. round-robin, percentage of activity monitored, etc.) are well

known in the art. By this rationale, "Official Notice" is taken that both the concept and

advantages of providing for relative load balancing techniques are well known and

expected in the art. It would be obvious to a person of ordinary skill in the art at the time

the invention was made to modify the invention of Bayeh to incorporate load balancing

techniques in order to easily route requests between entities efficiently, and effectively

utilize processing time in order to maximize throughput of the system.

18.   Referring to claim 8, Bayeh discloses the invention substantively as described in

claim 6 above. Bayeh does not specifically state the second group is chosen on the

basis of activity levels, however does disclose the sessions are assigned randomly to

particular threads, however does state that load-balancing techniques are well known in

the art (col. 8, lines 55-58). This would lead one of ordinary skill in the art to search for

load balancing techniques in which incorporate random load balancing assignment

techniques which are well known in the art. By this rationale, "Official Notice" is taken

that both the concept and advantages of providing for random load balancing

techniques are well known and expected in the art. It would be obvious to a person of

ordinary skill in the art at the time the invention was made to modify the invention of

Bayeh to incorporate random load balancing techniques in order to easily route

requests between entities efficiently, reducing processing overhead by not requiring

monitoring software for the processes, thereby increasing throughput and availability of

the system.

19.   Referring to claim 12, Bayeh discloses the invention substantively as described

in claim 1. Bayeh does not specifically disclose the sessions remain open for an

undetermined period of time until closed, however it is well known that clients can close

sessions on their own using HTTP (i.e. HTTP CLOSE function). By this rationale,

"Official Notice" that both the concepts and advantages of providing for sessions which remain open until closed is well known in the art. It would have been obvious to one of ordinary skill in the art to modify the teaching of Bayeh to include sessions which remain open until closed in order to conform to the HTTP protocol and allow computers which conform to this protocol to effectively manage their own sessions.

20.   Referring to claims 13 and 14, Bayeh discloses the invention substantively as described in claim 1. Bayeh does not specifically disclose the terminals are mobile terminals and cellular telephones, however it is well known that wireless mobile terminals and cellular telephones can act as client devices and request information from servers. By this rationale, "Official Notice" that both the concepts and advantages of providing for cellular telephones and mobile terminals as the terminals is well known and expected in the art. It would have been obvious to one of ordinary skill in the art to modify the system of Bayeh to include cellular phones as the terminals to allow the system to be accessed by a plurality of different entities, thereby providing a bigger market for the system and allowing more clients to access the system, and further increase customer satisfaction.

21.   Referring to claim 17, Bayeh discloses the invention substantively as described in claim 1. Bayeh does not specifically disclose the sessions are part of the Wireless Session Protocol (WSP), however the WSP is well known to easily provide session service from mobile devices to web servers and allow mobile terminals to access the

Internet. By this rationale, "Official Notice" is taken that both the concept and advantages of providing for using the WSP protocol for sessions is well known and expected in the art. It would have been obvious to one of ordinary skill in the art to provide using the WSP for the devices in order to allow mobile devices to access the service, thereby allowing more clients to access the system, and further increase customer satisfaction.

22.   Claims 19 and 20 are rejected for similar reasons as stated above.

Response to Amendment

23.   The Office has considered the amendment to the title, however the title "Server-Terminal(s) session management is still not descriptive as to how the terminal sessions are managed. Applicant should include information regarding grouping the sessions and assigning threads.

24.   The Office has considered the amendment to claim 12. The rejection under 35 USC 112, second paragraph is withdrawn.

Response to Arguments

25.   Applicant's arguments filed May 26, 2005 have been fully considered but they are not persuasive.

26.   In the remarks, Applicant argues, in substance, that (1) a servlet and a thread are

not interchangeable since a servlet is able to handle concurrent requests by using

multiple threads.

27.   As to point (1), Applicant's rationale is incorrect. Applicant is arguing the servlet

engine 70, which consists of multiple servlets 90 and 91. Bayeh discloses that any of

the web servers may invoke the services of a servlet available to that server...to

perform specific processing of a client's request (col. 9, lines 40-46). Furthermore the

servlet will perform its specific processing, eventually finishing and returning its results

to the server through the response object with which it was invoked (col. 10, lines 54-

58). The servlet does not spawn off multiple threads to execute the client request.

Even assuming that Applicant's rationale is correct, Applicant is claiming that a thread is

assigned to each group of sessions, which, according to Applicant's response page 7 is

done by the servlet. By this rationale, the rejection is maintained.

Conclusion

28.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within
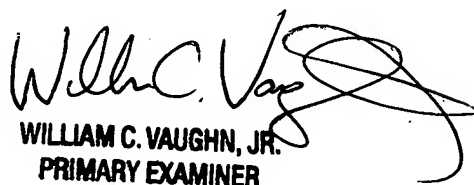
TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Joseph E. Avellino whose telephone number is (571)

272-3905. The examiner can normally be reached on Monday-Friday 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

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published applications may be obtained from either Private PAIR or Public PAIR.

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

JEA

WILLIAM C. VAUGHN, JR.
PRIMARY EXAMINER